

AMENDMENTS TO THE CLAIMS

Please amend claim 1, to read as follows:

1. (Currently Amended) A homogenizer comprising a thrust hydrodynamic bearing extending along and about a longitudinal axis and including a fixed portion and a disc-shaped agitation rotor disposed longitudinally apart from one another, the agitation rotor having an agitation rotor surface, the fixed portion and the agitation rotor surface ~~that are~~ opposingly arranged in a face-to-face manner to define a predetermined bearing clearance between the facially-opposing fixed portion and the agitation rotor surface, the fixed portion formed with at least one longitudinally-extending introduction port to introduce

~~wherein a plurality of mutually incompatible raw liquids are introduced in a longitudinally-flowing direction toward the agitation motor surface and~~ into the bearing clearance to be mixed and agitated in the bearing clearance by rotation of the agitation rotor; and

means for applying an external force to the agitation rotor in a direction opposite to the longitudinally-flowing direction, the external force being sufficient to maintain the predetermined bearing clearance constant while the agitation rotor rotates.

2. (Original) A homogenizer according to claim 1, further comprising a plurality of grooves arranged radially or spirally along a circumferential direction on one surface of the agitation rotor which is opposed to the fixed portion.

3. (Original) A homogenizer according to claim 2, wherein the one surface of the agitation rotor which is opposed to the fixed portion is divided into three regions of a center circle region, an intermediate ring region, and an outer ring region,

the homogenizer further comprising: agitation grooves; spiral-shaped pumping grooves; and introduction ports for the plurality of raw liquids,

the agitation grooves being formed radially on any one of the three regions and extending in a diameter direction,

the pumping grooves being formed on the other two of the three regions for

causing the plurality of raw liquids in the bearing clearance to flow into the agitation grooves by the rotation of the rotor,

the introduction ports being formed in the fixed portion at positions opposed to the pumping grooves of the agitation rotor.

4. (Previously Presented) A homogenizer according to any one of claims 1 to 3, further comprising a pressure release port, the pressure release port communicating with the bearing clearance and operative for adjusting a pressure in the bearing clearance.